CLAIM AMENDMENTS

1. (Currently Amended) A silica-containing laminated structure comprising a transparent thermoplastic resin substrate and, laminated thereon, at least one porous silica layer having a refractive index of 1.22 or more and less than 1.30,

wherein said at least one porous silica layer is ~~comprised of a plurality of moniliform silica strings, each comprising a plurality of primary silica particles which are linked in rosary form,~~ formed by a method comprising:

(1) providing a coating composition comprising a product obtained by a method comprising:

mixing a dispersion of moniliform silica strings with a hydrolyzable group-containing silane to obtain a mixture, wherein each of the moniliform silica strings comprises a plurality of primary silica particles which are linked in rosary form, and

subjecting the obtained mixture to hydrolysis and dehydration-condensation, and

(2) applying said coating composition on a substrate, followed by drying and curing,

wherein the pores of said at least one porous silica layer include pores (P), each of said pores (P) having a pore opening area which is larger than the average value of the respective maximum cross-sectional areas of said primary silica particles, wherein said pore opening areas of said pores (P) are measured with respect to the pore openings in the surface or cross-section of said porous silica layer,

wherein a part or all of said pores (P) have their respective pore opening areas (a_1), each of said pore opening areas (a_1) being independently at least 3σ larger than the average value (a_2) of the respective maximum cross-sectional areas of said primary silica particles, wherein said pore opening areas (a_1) are measured with respect to the pore openings in the surface or cross-section of said porous silica layer, and wherein σ represents the standard deviation of the measured values of the maximum cross-sectional areas of said primary silica particles, and

wherein the total ($S_{(a2+3\sigma)}$) of said pore opening areas (a_1) of said pores (P) and the total (S) of pore opening areas of all pores of said porous silica layer as measured with respect to the pore openings in the surface or cross-section of said porous silica layer satisfy the following formula (1):

$$(S_{(a2+3\sigma)})/(S) \geq 0.5 \qquad (1).$$

2. (Original) The silica-containing laminated structure according to claim 1, wherein said moniliform silica strings have an average length of from 30 to 200 nm in terms of the average value as measured by the dynamic light scattering method.

3. (Previously Presented) The silica-containing laminated structure according to claim 1, wherein the amount of silicon atoms present in said moniliform silica strings is 15 % or more, based on the total number of silicon atoms present in said at least one porous silica layer.

4. (Cancelled)

5. (Previously Presented) The silica-containing laminated structure according to claim 1, wherein said transparent thermoplastic resin substrate has a pencil hardness of from 1H to 8H.

6. (Withdrawn) The silica-containing laminated structure according to claim 1, which further comprises a hard coat layer having a water contact angle of 85° or less between said transparent thermoplastic resin substrate and said porous silica layer.

7. (Withdrawn) A coating composition for use in forming on a substrate a porous silica layer having a low refractivity, which comprises a product obtained by a method comprising:

mixing a dispersion of moniliform silica strings with a hydrolyzable group-containing silane to obtain a mixture, wherein each of said moniliform silica strings comprises a plurality of primary silica particles which are linked in rosary form, and

subjecting the obtained mixture to hydrolysis and dehydration-condensation.

8. (Withdrawn) The coating composition according to claim 7, wherein said moniliform silica strings have an average length of from 30 to 200 nm in terms of the average value as measured by the dynamic light scattering method.

9. (Withdrawn) The coating composition according to claim 7, wherein the molar ratio of said hydrolyzable group-containing silane to the silicon atoms present in said moniliform silica strings is from 0.005 to 1.0.

10. (Withdrawn) The coating composition according to claim 7, which further comprises at least one alkaline earth metal salt.

11. (Withdrawn) The coating composition according to claim 10, wherein the molar ratio of said at least one alkaline earth metal salt to the silicon atoms present in said moniliform silica strings is from 0.001 to 0.1.

12. (Withdrawn) The coating composition according to claim 7, which further comprises an acid in a concentration of 0.0008 mol/liter or more, and which has a water content of more than 1.5 parts by weight, per part by weight of said moniliform silica strings.

13. (Withdrawn) An antireflection film comprising at least one porous silica layer having a low refractivity, which is formed by using the coating composition of any one of claims 7 to 12.

14. (Currently Amended) An antireflection film comprising a silica-containing laminated structure comprising a transparent thermoplastic resin substrate and, laminated thereon, at least one porous silica layer having a refractive index of 1.22 or more and less than 1.30,

wherein said at least one porous silica layer is comprised of a plurality of moniliform silica strings, each comprising a plurality of primary silica particles which are linked in rosary form, and

wherein the pores of said at least one porous silica layer include pores (P), each of said pores (P) having a pore opening area which is larger than the average value of the respective maximum cross-sectional areas of said primary silica particles, wherein said pore opening areas of said pores (P) are measured with respect to the pore openings in the surface or cross-section of said porous silica layer, and

wherein said at least one porous silica layer contained in said silica-containing laminated structure is formed by using the coating composition of any one of claims 7 to 12.

15. (Currently Amended) An antireflection film comprising a silica-containing laminated structure comprising a transparent thermoplastic resin substrate and, laminated thereon, at least one porous silica layer having a refractive index of 1.22 or more and less than 1.30,

wherein said at least one porous silica layer is comprised of a plurality of moniliform silica strings, each comprising a plurality of primary silica particles which are linked in rosary form,

wherein the pores of said at least one porous silica layer include pores (P), each of said pores (P) having a pore opening area which is larger than the average value of the respective maximum cross-sectional areas of said primary silica particles, wherein said pore opening areas of said pores (P) are measured with respect to the pore openings in the surface or cross-section of said porous silica layer,

wherein a part or all of said pores (P) have their respective pore opening areas (a_1), each of said pore opening areas (a_1) being independently at least 3σ larger than the average value (a_2) of the respective maximum cross-sectional areas of said primary silica particles, wherein said pore opening areas (a_1) are measured with respect to the pore openings in the surface or cross-section of said porous silica layer, and wherein σ represents the standard deviation of the measured values of the maximum cross-sectional areas of said primary silica particles,

wherein the total ($S_{(a2+3\sigma)}$) of said pore opening areas (a_1) of said pores (P) and the total (S) of pore opening areas of all pores of said porous silica layer as measured with respect to the pore openings in the surface or cross-section of said porous silica layer satisfy the following formula (1):

$$(S_{(a2+3\sigma)})/(S) \geq 0.5 \qquad (1), \text{ and}$$

wherein said at least one porous silica layer contained in said silica-containing laminated structure is formed by using the coating composition of any one of claims 7 to 12.